

Notice of Allowability

Application No.

10/004,971

Examiner

LeChi Truong

Applicant(s)

ALI ET AL.

Art Unit

2194

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed on 05/16/2006.
2. ☒ The allowed claim(s) is/are 1, 3, 4-6, 8-13, 16, 18-24 now renumbered as claims 1-19.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

Examiner's Amendment

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR

1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2. Authorization for this examiner's amendment was given in a telephone interview with Mr. Robert P. Lord (registration number: 46, 479) on 08/12/2006.

3. Amend the following claims:

1. (Previously Presented) A computer-implemented method for a system having distributed collaborating components, comprising:

restricting direct interaction between a first distributed collaborating component and a second distributed collaborating component by introducing an application-independent interface between the first and second distributed collaborating components;

invoking a service from the application-independent interface to enable interaction between the first and second distributed collaborating components; and

sending a usage specification as an argument to the application-independent interface, wherein the usage specification comprises a server object and a plurality of attributes associated with the server object that are requested by the first distributed collaborating component from the second distributed collaborating component,

wherein the application-independent interface is configured to:

interpret the usage specification to determine the plurality of attributes to fetch from the second distributed collaborating component;

obtain the plurality of attributes from the second distributed collaborating component; and
provide the first distributed collaborating component with the plurality of attributes.

2. (Cancelled)

3. (Previously Presented) The method of claim 1, wherein the application-independent interface has a capability to interpret the usage specification at runtime.

4. (Previously Presented) A computer-implemented method for a system having distributed collaborating components, comprising:

restricting direct interaction between a first distributed collaborating component and a second distributed collaborating component by introducing an application-independent interface between the first and second distributed collaborating components; and

invoking a service from the application-independent interface to enable interaction between the first and second distributed collaborating components; and

sending a usage specification as an argument to the application-independent interface, wherein the usage specification comprises a server object and a plurality of attributes associated with the server object that are requested by the first distributed collaborating component from the second distributed collaborating component,

wherein the application-independent interface is configured to:

interpret the usage specification to determine the plurality of attributes to fetch from the second distributed collaborating component;

obtain the plurality of attributes from the second distributed collaborating component; and

provide the first distributed collaborating component with the plurality of attributes.

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5. (Original) The method of claim 4, wherein the application-independent interface has a capability to interpret the logic execution specification at runtime.

6. (Currently Amended) A method for a distributed system having a client and a server, comprising:

interposing a service layer between the client and the server, the service layer having a

capability to interpret a usage specification sent as an argument from the client at runtime to

enable interaction between the client and the server, wherein the direct interaction between

the client and the server is restricted by the service layer;

invoking a service from the service layer to enable interaction between the client and server; and

routing correspondence between the client and server through the service layer,

wherein the usage specification comprises a server object and a plurality of attributes associated with the server object that are requested by the client from the server[[:]], and

~~routing correspondence between the client and server through the service layer,~~

wherein the service layer is configured to:

interpret the usage specification to determine the plurality of attributes to fetch from the server;

obtain the plurality of attributes from the server; and

provide the client with the plurality of attributes.

7. (Canceled)

8. (Currently Amended) The method of claim [[7]] 6, further comprising:

the service layer fetching data from the server object based on the usage specification.

9. (Previously Presented) The method of claim 8, wherein fetching data from the server object comprises storing data fetched from the server in a proxy for the object.

10. (Currently Amended) The method of claim ~~[[7]]~~ 6, further comprising the service layer updating data in the server object based on the usage specification.
11. (Previously Presented) The method of claim **10**, wherein updating data in the server object comprises receiving data from the client and using data received from the client to modify the attribute of the server object.
12. (Currently Amended) The method of claim **6**, wherein the service layer is further configured to interpret a logic execution specification comprising logic for invoking a method of the server object.
13. (Currently Amended) The method of claim **12**, wherein interpreting the logic execution specification comprises invoking the method of the server object.
14. (Cancelled)
15. (Cancelled)
16. (Currently Amended) A computer-readable medium having recorded thereon instructions executable by a processor, the instructions for:
interposing a service layer between a client and a server, the service layer configured to interpret a usage specification sent as an argument from the client at runtime to enable interaction between the client and the server, wherein the direct interaction between the client and the server is restricted by the service layer;
invoking the service from the service layer to enable interaction between the client and server; and
receiving the usage specification as an argument from ~~[[a]]~~ the client ~~component~~, wherein the usage specification comprises a server object and a plurality of attributes associated with the server object that are requested by the client from the server;
and

interpreting the usage specification to enable interaction between the client ~~component~~ and ~~[[a]] the server component~~, wherein interpreting the usage specification comprises:

determining the plurality of attributes to fetch from the server ~~component~~;
obtaining the plurality of attributes from the server ~~component~~; and
providing the client ~~component~~ with the plurality of attributes.

17. (Cancelled)

18. (Previously Presented) The computer-readable medium of claim 16, further comprising:
instructions for fetching data from the server object based on the usage specification.

19. (Previously Presented) The computer-readable medium of claim 16, further comprising:
instructions for updating data in the server object based on the usage specification.

20. (Previously Presented) The computer-readable medium of claim 16, further comprising
instructions for receiving and interpreting a logic execution specification comprising
logic for invoking a method of an object on the server.

21. (Previously Presented) The computer-readable medium of claim 20, wherein interpreting
the logic execution specification comprises invoking the method of the object.

22. (Currently Amended) A distributed system, comprising:

a client component;

a server component having at least one object at runtime; and

interposing a service layer between the client and the server component, the service layer
having a capability to interpret a usage specification comprising a plurality of
attributes associated with the at least one object, wherein the usage specification
is sent as an argument at runtime, and
invoking the service from the service layer to enable interaction between the client
component and server component; and

wherein the usage specification comprises a server object and a plurality of attributes associated with the server object that are requested by the client component from the server component;

wherein interpreting the usage specification comprises:

determining the plurality of attributes to fetch from the server component;
obtaining the plurality of attributes from the server component; and
providing the client component with the plurality of attributes.

23. (Previously Presented) The distributed system of claim 22, wherein the service layer further has a capability of interpreting a logic execution specification in the server component at runtime.

24. (Previously Presented) A distributed system, comprising:

a service means for providing application-independent services and for interpreting a usage specification and a logic execution specification, wherein the usage specification comprises a server object and a plurality of attributes associated with the server object that are requested by a client component from a server component~~[[;]]~~, wherein the application-independent service is introduced between the client and server components to restrict direct interaction between the client component and the server component and wherein a service from the application-independent service is invoked to enable interaction between the client component and server component; and

the client component ~~that sends~~ configured to send the usage specification and the logic execution specification as an argument to the service means; and

the server component ~~that interacts~~ configured to interact with the service means in order to provide services to the client component,

wherein the service means is configured to:

determine the plurality of attributes to fetch from the server component;
obtain the plurality of attributes from the server component; and
provide the client component with the plurality of attributes.

25. - 26. (Cancelled)

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to LeChi Truong whose telephone number is (571) 272 3767. The examiner can normally be reached on 8 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomson, William can be reached on (571) 272 3718. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIP. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIP system, contact the Electronic Business Center (EBC) at 866-217-9197(toll-free).

LeChi Truong

August 16, 2006


WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

DETAILED ACTION

1. This is in responding to the amendment filed 05/16/2006.

Allowable Subject Matter

2. Claims 1, 3, 4, 5, 6, 8-13, 16, 18-24 are allowed.

3. The following is an examiner's statement of reasons for allowance:

As to claims 1, 3, 4, 5, 6, 8-13, 16, 18-24, the prior art as taught by Sumsion et al(US. Patent 6,496,865 B1) and Glass(US. Patent 6,947,965 B2) do not teach on render obvious the limitations recited in claims 1, 4, 6, 16, 22, 24 when taken in the context of the claims as a whole, sending a usage specification as an argument to the application-independent interface, wherein the usage specification comprises a server object and a plurality of attributes associated with the server object, providing the first distributes collaborating component with the plurality of attributes as recited in the independent claims 1, 4, 6, 16, 22, 24. Moreover, evidence for modifying the prior art teachings by one of ordinary skill level in the art was not uncovered so as to result in the invention as recited in claims 1, 4, 6, 16, 22, 24.

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to LeChi Truong whose telephone number is (571) 272 3767. The examiner can normally be reached on 8 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomson, William can be reached on (571) 272 3718. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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August 16, 2006


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